



# KNEE SYMPOSIUM

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CHICAGO, ILLINOIS

DR. GRACE STRINGFELLOW, MD

DR. ANN DEW, DO



# COURSE OBJECTIVES

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- REVIEW OF KNEE ANATOMY & PHYSIOLOGY
- REVIEW EVALUATION, DIAGNOSIS, & TREATMENT OF COMMON KNEE INJURIES
- REVIEW MECHANISM OF INJURY & PREVENTION OF WORK-RELATED INJURIES



# KNEE SYMPOSIUM- ANATOMY

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- BONES
- JOINTS
- LIGAMENT
- MUSCLES
- NERVES



# KNEE ANATOMY- BONES

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- FEMUR
- TIBIA
- FIBULA
- PATELLA



# KNEE ANATOMY- LIGAMENTS

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- ACL
- PCL
- MEDIAL COLLATERAL
- LATERAL COLLATERAL
- MENISCUS- MEDIAL
- MENISCUS- LATERAL

# KNEE ANATOMY- MUSCLES



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- EXTENSION
- PRIMARY EXTENSOR
- QUADRICEPS



# KNEE ANATOMY- MUSCLES

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- FLEXION
- PRIMARY FLEXOR
- SEMIMEMBRANOSUS
- SEMITENDINOSUS
- BICEPS FEMORIS



# KNEE & LOWER LEG NERVES

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- FEMORAL
- SCIATIC
- TIBIAL
- PERONEAL
- SUPERFICIAL PERONEAL
- DEEP PERONEAL

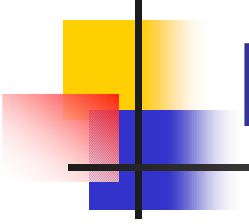




# KNEE EXAM-BONY PALPATION

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- MEDIAL ASPECT
- MEDIAL TIBIAL PLATEAU
- TIBIAL TUBERCLE
- MEDIAL FEMORAL CONDYLE
- ADDUCTOR TUBERCLE



# KNEE EXAM- BONY PALPATION

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- LATERAL ASPECT
- LATERAL TIBIAL PLATEAU
- LATERAL TUBERCLE
- LATERAL FEMORAL CONDYLE
- LATERAL FEMORAL EPICONDYLE
- HEAD OF THE FIBULA
- TROCHLEAR GROOVE & PATELLA



# KNEE EXAM

## SOFT TISSUE PALPATION

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- ZONE I- ANTERIOR ASPECT
- QUADRICEPS
- INFRAPATELLAR TENDON
- SUPERFICIAL INFRAPATELLAR BURSA
- PREPATELLAR BURSA
- PES ANSERINE BURSA



# KNEE EXAM

## SOFT TISSUE PALPATION

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- ZONE II- MEDIAL ASPECT
- MEDIAL MENISCUS
- MEDIAL COLLATERAL LIGAMENT
- SARTORIUS, GRACILIS,  
SEMITENDINOSUS



# KNEE EXAM

## SOFT TISSUE PALPATION

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- ZONE III- LATERAL ASPECT
- LATERAL MENISCUS
- LATERAL COLLATERAL LIGAMENT
- ANTERIOR SUPERIOR TIBIOFIBULAR LIGAMENT
- BICEPS FEMORIS TENDON
- ILIOTIBIAL TRACT
- COMMON PERONEAL NERVE



# KNEE EXAM

## SOFT TISSUE PALPATION

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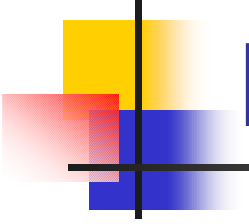
- POSTERIOR ASPECT
- POPLITEAL FOSSA
- POSTERIOR TIBIAL NERVE
- POPLITEAL VEIN
- POPLITEAL ARTERY
- GASTROCNEMIUS

# KNEE EXAM

## TESTS FOR JOINT STABILITY

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- COLLATERAL LIGAMENTS
- CRUCIATE LIGAMENTS



# KNEE EXAM

## RANGE OF MOTION

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- FLEXION- 140
- EXTENSION- 0
- INTERNAL ROTATION- 10
- EXTERNAL ROTATION- 10

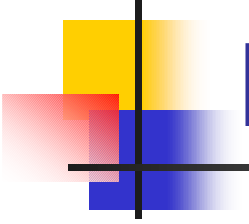


# KNEE EXAM

## NEUROLOGIC EXAMINATION

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- MUSCLE TESTING
- EXTENSION
- FLEXION
- INTERNAL ROTATION
- EXTERNAL ROTATION



# KNEE EXAM

## NEUROLOGIC EXAM

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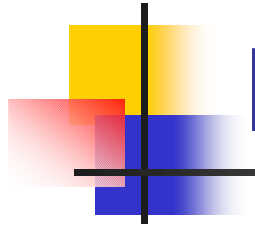
- SENSATION TESTING
- REFLEX TESTING
- PATELLAR REFLEX: L2,3,4



# COMMON KNEE INJURIES

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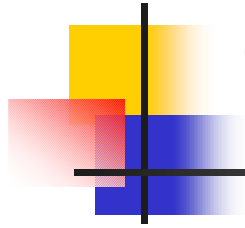
- TENDONITIS
- BURSITIS
- OA
- MENISCUS INJURY
- LIGAMENT INJURY



# EVALUATION

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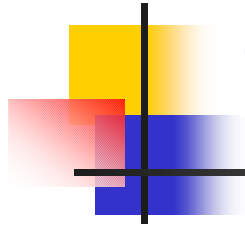
- PHYSICAL EXAM
- X-RAY
- MRI
- CT
- ARTHROGRAM
- BONE SCAN
- EMG/NCV



# TREATMENT

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- Rest
- Ice
- Compression
- Elevation



# TREATMENT

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- NSAIDS
- PHYSICAL THERAPY
- INJECTIONS
- SURGERY

# PREVENTION



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## WELLNESS

- EXERCISE
- WEIGHT MANAGEMENT
- NUTRITION
- ERGONOMICS